

ABSTRACT OF THE DISCLOSURE

Provided are a multi-beam scanning optical system capable of implementing high-quality printing in relatively simple structure and at high speed, and an
5 image forming apparatus using it. The multi-beam scanning optical system has an incidence optical unit for guiding a plurality of beams emitted from a light source unit having a plurality of light-emitting regions spaced apart from each other in a main scanning
10 direction, to a deflector; a scanning optical unit for focusing the plurality of beams deflected by the deflector, on a surface to be scanned; and a synchronism-detecting optical unit for converging part of the plurality of beams deflected by the deflector,
15 via a return mirror on a slit surface by a lens section, thereafter guiding the beams to a synchronism detector, and controlling timing of a scan start position on the surface to be scanned, by use of a signal from the synchronism detector. The elements are
20 set so as to satisfy Condition (A) where δM is a defocus amount in a main scanning section of the beams guided to the synchronism detector and in a view from the slit surface and δX is a defocus amount at each image height on the surface to be scanned.